

### **ABSTRACT OF THE INVENTION**

A multi-point touch pad device having a base with a top surface that defines a plane. A support layer has a top surface and a bottom surface. The top surface of the support layer contains a plurality of strain gauges that are disposed on the top surface of the support layer in a matrix configuration. A touch layer is disposed on top of the strain gauge matrix; the touch layer is joined to the top of the strain gauge matrix. Sensor wires connect the strain gauges to a processor which is programmed with an algorithm to measure the location and pressure of simultaneous, multiple touches.